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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/077,884	02/20/2002	Kailash C. Vasudeva	PAT 51411-2 US	6451

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EXAMINER

HOWELL, DANIEL W

ART UNIT PAPER NUMBER

3722

10

DATE MAILED: 04/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/077,884

Applicant(s)

VASUDEVA, KAILASH C.

Examiner

Daniel W. Howell

Art Unit

3722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,7 and 9 is/are rejected.
- 7) ☒ Claim(s) 3-6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)     | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date. _____  | 6) <input type="checkbox"/> Other: _____                                    |

1. Before treating the claims, the examiner will make some initial comments. When amending claim 1, Applicant chose to **delete a limitation**. Further, rather than add the subject matter of both claims 7 and 8 as originally filed to claim 1 as suggested by the prior Office action, Applicant chose to leapfrog claim 8 over claim 7 by merely combining claims 1 and 8. By doing so, the “reliefs” of lines 11-12 of claim 1 can be met by things other than the kind of relief disclosed by Applicant. For instance, even though Applicant did not disclose a conventional axial taper relief (as notoriously common in the prior art), such an axial taper will meet the subject matter of lines 11-12 of amended claim 1. Note that a 112, 2<sup>nd</sup> paragraph, rejection will be made below on this general topic.
2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
3. Claim 1 rejected under 35 U.S.C. 102(b) as being anticipated by Sydlowski et al. Bit 10 has tip 34, two cutting edges 30, 32, an opposed rearward facing bottom edge, and two side edges 26, 28. As seen best in figure 3, the sides have been bent forward in the direction of rotation. With regard to the “relief” which is newly added to claim 1, note that column 3, lines 9-23, describe an **axial** relief on the edges 30, 32, which will reduce binding of the tool with the wall of the hole.
4. Claims 1 and 7 are rejected under 35 U.S.C. 102(a) as being anticipated by Haughton et al. Figures 1 and 2 show a central lead tip 16, two cutting edges 30, rear edges 40, side edges 34,

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36, and a bend of the cutting edges in the direction of rotation. Close examination of side edges 34, 36, will show that they have a slight **axial relief** in order to prevent binding in the drilled hole. The tip is relieved at 76.

5. Claims 7 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Lines 11-12 of claim 1 set forth "reliefs." It is noted that nothing about that is indefinite. Claims 7 and 9 then set forth "reliefs arranged in the cutting direction." In reality, the reliefs of claims 7 and 9 are the same reliefs as the one set forth in claim 1, such that claims 7 and 8 should be written in such a way that they further limit the relief which was set forth in claim 1.

6. Claims 1, 2, 7, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by PCT '459. Figures 8 and 9 show an embodiment having a central point 16, two cutting edges 24, two side edges, and peripheral spurs 26, 28. As seen from figure 9, the forward part of the blade where the cutting edges are located is bent in the direction of rotation. Figure 8 shows the conventional **axial relief** of the side edges which prevents the side edges from dragging on the hole which has been drilled. As seen from figure 8, the cutting edge of the tip 16 is relieved to form sharper cutting edge and a chip flute.

7. Claims 3-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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8. Applicant's arguments filed 1-12-04 have been fully considered but they are not persuasive. As stated above, Applicant chose to both remove a limitation from claim 1 and not amend claim 1 to include the subject matter of both claims 7 and 8. The prior Office action had stated that the combination of claims 1, 7, and 8 would be allowable. Because of the way that claim 1 has been amended, new art has been applied to meet the new combination of claim limitations.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning the content of this communication from the examiner should be directed to Daniel Howell, whose telephone number is 703-308-1728. The examiner's office hours are typically about 10 am until 6:30 pm, Monday through Friday. The examiner's supervisor, Andrea Wellington, may be reached at 703-308-2159.

Any inquiries concerning other than the content of this and previous communications, such as missing references or filed papers not acknowledged, should be directed to the Customer Service Center for Tech Center 3700 at 703-306-5648.

In order to reduce pendency and avoid potential delays, Group 3720 is encouraging FAXing of responses to Office actions directly into the Group at FAX number 703-872-9306. This practice may be used for filing papers not requiring a fee. It may also be used for filing

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papers which require a fee by applicants who authorize charges to a USPTO deposit account. Please identify Examiner Daniel Howell of Art Unit 3722 at the top of your cover sheet.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is 703-308-1148.

A handwritten signature in black ink, appearing to read 'Howell', is positioned above the printed name.

Daniel W. Howell  
Primary Examiner  
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